A NEW SUBSPECIES OF POLYGYRA MULTILINEATA SAY.

BY WM. A. NASON.

Polygyra multilineata algonquinensis n. subsp.

The shell is smaller than *multilineata*, color varying from white translucent to dark horn or chestnut, banded with reddish brown or unicolorous, rather thin and fragile, peristome moderately reflected, white.

Greater diameter 17 mm., 32 specimens.

Greater diameter 17.5 mm., 24 specimens.

Greater diameter 18 mm., 72 specimens.

Greater diameter 18.5 mm., 41 specimens.

Greater diameter 19 mm., 54 specimens.

Algonquin, McHenry Co., Illinois.

Cotypes in collections of Bryant Walker, Acad. Nat. Sci. Phila., Chicago Academy of Sciences, and Arthur F. Gray.

All the specimens collected were examined, 284 in number, and their average size is expressed in the above table of measurements. The largest specimens found were three which measured 21 mm. in greater diameter, and the two smallest specimens only measured 14.50 mm. in greater diameter. No larger specimens than those mentioned were found in the region, although the ground was well explored for many years.

The specimens were all found in crevices and hollows about the roots of a clump of willows, growing in a marshy and boggy place. Associated with them were numerous specimens of *Polygyra mono*don Rack., Succinea ovalis Say, Pomatiopsis lapidaria Say, Pyramidula striatella Anth., and other moisture-loving land shells.

A comparison made with 48 specimens of *P. multilineata* from Ohio, Michigan, and other localities, in my collection, showed great difference in measurements. 33 specimens of this series measured 22 mm. to 24 mm. in greater diameter, and only two specimens were as small as 21 mm. in diameter.

The uniformity of size of the variety *algonquinensis*, the fact that no other forms or sizes of the species were found in this region, and the fact that they breed true, for the series was the result of three years' collecting on the same small space of ground, entitles this shell to varietal rank. And also, the perfect development of all the characters, as found in the normal *P. multilineata*, and the fact that this

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new subspecies is not in any way pathological, confirms the claim. The smallest forms mentioned above are as well characterized and symmetrical as the largest forms.

An interesting fact in regard to the specific value of the bands in this variety is exhibited by two or three specimens. In these the shell is unicolorous until half-grown, and banded from that point to the reflected lip. And one specimen is the reverse in this respect, being banded when young, and later in its growth unicolorous. This would seem to indicate that the bands and color are not even a stable individual character.

LYMNAEA HINKLEYI N. SP.

BY FRANK COLLINS BAKER.

Shell varying from ovate to globose, very thin; color of periostracum light greenish-horn; surface dull to slightly shining, rough, the growth lines uneven and raised at intervals to form pseudo ribs; the surface is sometimes malleated and occasionally ornamented by five or six heavy spiral ridges; fine spiral, impressed lines present and very marked in some specimens; whorls 3 + (the apex invariably decollated), rounded, tumid in some specimens, the last whorl globose; spire of variable length but generally shorter than the aperture, broadly conic; sutures distinctly appressed and frequently distinctly impressed; aperture roundly ovate, not expanded, acutely narrowed at the posterior angle; onter lip thin, acute; inner lip very tightly appressed to the parietal wall, where it shows as a very thin wash of callus; the anterior part of the inner lip is reflected over the umbilicus, leaving a very small chink; axis slightly twisted, forming a distinct ascending plait.

Length 12, breadth 8.5, aperture length 8, breadth 5 mm.

Length 11.5, breadth 7.5, aperture length 7.25, breadth 4.5 mm.

Length 12, breadth 7.75, aperture length 7, breadth 4 mm.

Length 11, breadth 6.75, aperture length 6.25, breadth 3.75 mm. Length 15.25, breadth 9.25, aperture length 10.5, breadth 5.5 mm. Length 11, breadth 6.75, aperture length, 6.5, breadth 3.75 mm.

North fork Snake River, East Idaho. Collected by Mr. A. A. Hinkley in 1905. Types: Chicago Academy of Sciences; cotypes: Academy of Natural Sciences of Philadelphia, and Mr. A. A. Hinkley.

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